

IN THE CLAIMS:

Claims 1-10 (Cancelled)

11. (New) Method for manufacturing cement clinker comprising:
preheating and burning cement raw meal in a plant comprising a cyclone preheater and a kiln;
extracting at least a portion of the raw meal from the cyclone preheater;
introducing the raw meal into a separate unit in which the raw meal is given a retention time under oxidating conditions provided by means of a gas stream for forming SO₂ and for expelling organic carbon;
discharging the formed SO₂ and the expelled organic carbon from the separate unit entrained in a gas stream for further treatment in a subsequent process stage; and
reintroducing the raw meal into the cyclone preheater.
12. (New) Method according to claim 11, wherein all of the raw meal is extracted from the cyclone preheater for oxidation in the separate unit.
13. (New) Method according to claim 11, wherein the raw meal is extracted from the cyclone preheater at a temperature between 350°C and 525°C.
14. (New) Method according to claim 12, wherein the raw meal is extracted from the cyclone preheater at a temperature between 350°C and 525°C.
15. (New) Method according to claim 11, wherein the raw meal is extracted from the cyclone preheater at a temperature between 400°C and 500°C.
16. (New) Method according to claim 12, wherein the raw meal is extracted from the cyclone preheater at a temperature between 400°C and 500°C.
17. (New) Method according to claim 11, wherein the temperature in the separate unit is kept substantially constant during the oxidation process.

18. (New) Method according to claim 12, wherein the temperature in the separate unit is kept substantially constant during the oxidation process.
19. (New) Method according to claim 11, wherein the raw meal is given a retention time in the separate unit within the range of 10 to 200 seconds.
20. (New) Method according to claim 12, wherein the raw meal is given a retention time in the separate unit within the range of 10 to 200 seconds.
21. (New) Method according to claim 11, wherein the raw meal is given a retention time in the separate unit within the range of 10 to 100 seconds.
22. (New) Method according to claim 12, wherein the raw meal is given a retention time in the separate unit within the range of 10 to 100 seconds.
23. (New) Method according to claim 11, wherein the that the formed SO₂ and the expelled organic carbon, and which is discharged from the separate unit, is introduced into a calciner of the cyclone preheater.
24. (New) Method according to claim 12, wherein the that the formed SO₂ and the expelled organic carbon, and which is discharged from the separate unit, is introduced into a calciner of the cyclone preheater.
25. (New) Method according to claim 11, wherein the extracted and separately oxidated raw meal is introduced into the cyclone preheater immediately after the point where it was extracted, viewed in the direction of flow of the raw meal.
26. (New) Method according to claim 12, wherein the extracted and separately oxidated raw meal is introduced into the cyclone preheater immediately after the point where it was extracted, viewed in the direction of flow of the raw meal.
27. (New) Plant for manufacturing cement clinker comprising a cyclone preheater; a kiln, means for extracting at least a portion of the raw meal from the cyclone preheater; separate means for giving the raw meal a retention time under oxidating conditions and thereby ensuring oxidation by means of a gas stream of sulphide contained in this raw meal for the formation of SO₂ and for the expulsion

of organic carbon; means for discharging the formed SO₂ and the expelled organic carbon from the separate unit entrained in a gas stream for further treatment in a subsequent process stage; and means for reintroducing the raw meal into the cyclone preheater.

28. (New) Plant according to claim 27, further comprising a wet scrubber for treatment of the formed SO₂, which is discharged from the separate unit entrained in the gas stream.